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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/581,327	06/01/2006	Hiroji Masuda	5259-000065/US/NP	3625

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EXAMINER	
WOLDEKIDAN, HIBRET ASNAKE	

ART UNIT	PAPER NUMBER
2613	

MAIL DATE	DELIVERY MODE
04/21/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Advisory Action Before the Filing of an Appeal Brief	**Application No.** 10/581,327	**Applicant(s)** MASUDA ET AL.	
	Examiner Hibret A. Woldekidan	**Art Unit** 2613	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 08 April 2010 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:
   a) ☒ The period for reply expires *3* months from the mailing date of the final rejection.
   b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

   Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
   (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
   (b) ☐ They raise the issue of new matter (see NOTE below);
   (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
   (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

   NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).
4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
   The status of the claim(s) is (or will be) as follows:
   Claim(s) allowed: _____.
   Claim(s) objected to: _____.
   Claim(s) rejected: *1-14 and 17-19*.
   Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☐ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: _____.
12. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). _____
13. ☒ Other: See Continuation Sheet.

/Kenneth N Vanderpuye/
Supervisory Patent Examiner, Art Unit 2613

Continuation of 13. Other: Applicant Argument I

1. Applicant Argued on Page 8-9 of the Remark,"
…With respect to the claimed limitation of "with the longest wavelength of the pumping light being shorter than the shortest wavelength of the signal light so as to have a frequency difference of 13.7 to 17.9 THz", the Examiner points out FIGS. 23 and 25 of Inoue (page 3, first paragraph, last six lines of the Office Action). The wavelength of forward pumping light shown in FIG. 25 of Inoue, however, is the wavelength used for a HNL (i.e., highly nonlinear fiber) … In contrast, claim 1 has been amended so that the silica fiber is laid throughout a city…

Examiner Answer

Examiner respectfully disagrees because the limitations in the claim do not specifically disclose whether the fiber has to be a single mode fiber(SMF) or a highly non linear fiber(HNL). The claim only states a silica fiber laid throughout a city for use in Raman amplification. "…laid throughout a city…" is a broad term. It does not specify the length of the fiber. Any fiber used for transporting signals from any Point A to any Point B can be considered as a fiber laid throughout a city. The claim states an incoming signal light that is pumped with a forward pump light. Similarly, Inoue discusses in fig. 23, a Raman amplification system having an incoming signal light within wavelength range of 1480nm~1630nm, a first and second forward pumping unit. The first pumping unit is placed before a single mode fiber(SMF) portion and the second pumping unit is before the highly non linear(HNL) fiber portion. Both the SMF and the HNL fiber are used for Roman amplification(See Col. 14 lines 49-55).

Since the claim does not state whether the fiber has to be a SMF or HNL fiber, or specify the type of forward pumping light, examiner determined the frequency difference based on the forward pumping light of a HNL fiber. The calculated frequency difference based on a forward pumping light of 1385nm(See fig. 25), and the shortest signal light of wavelength of ~1480nm(See fig. 23) is 13.9THz which is within the given frequency range of the limitation 13.7-17.9THz.

Further examiner used a secondary reference(Islam) to emphasize that a similar Raman amplification system can be used for broadcasting or distributing signals throughout a given area.

Therefore, since the enclose HNL fiber used in fig. 23,25 is part of a Raman amplification system and the Raman amplification system is used to distribute signal throughout a given area or city, and the calculated frequency difference is 13.9THz which is within the given frequency range of the limitation 13.7-17.9THz, the argued feature is not persuasive.

Applicant Argument II

2. Applicant Argued on Page 9 last Paragraph to Page 10 first Paragraph of the Remark,"…With respect to the relationship between the longest wavelength of forward pumping light, which is used for distributed Raman amplification (i.e., in FIG. 23 of Inoue, forward pumping light supplied to the SMF 30), and the shortest wavelength of signal light, the frequency difference there between in Inoue does not fall within the claimed frequency range of 13.7 to 17.9 THz. This holds true for the examples in FIG. 7and FIG. 28 as well. Accordingly, Inoue cannot be relied upon to teach or otherwise suggest the foregoing limitations…"

Examiner Answer

Examiner respectfully disagrees because the claim does not specifically state the fiber has to be a single mode fiber(SMF). The claim only states a silica fiber laid throughout a city.

Fig. 23 of Inoue illustrates a Raman amplification system(See Col. 14 line 49-50).It has an input signal light within a range of 1480~1630nm. It has a single mode fiber(SMF) portion and a highly non linear (HNL) fiber portion. As shown in fig. 25 the wavelength for the forward pumping of the HNL is 1385nm which is considered as the longest pumping wavelength since it is the only pumping wavelength provided for the HNL fiber. The calculated frequency difference based on a forward pumping light of 1385nm(See fig. 25), and the shortest signal light of wavelength of ~1480nm(See fig. 23) is 13.9THz which is within the given frequency range of the limitation 13.7-17.9THz.

Even if the calculated frequency difference is based on the forward pumping for the HNL fiber portion of the system, the claim does not clearly state what kind of fiber the system has to use. The claim simply states a silica fiber laid throughout a city for use in Raman amplification. The pumping light used for the HNL fiber is also part of a Raman amplification system(See Col. 14 lines 49-55).

Examiner further used a secondary reference(Islam) to further emphasize that a similar Raman amplification system can be used for broadcasting to distribute signals throughout a given area. Therefore, since the enclose HNL fiber used in fig. 23,25 is part of a Raman amplification system and the Raman amplification system is used to distribute signal throughout a given area or city, and the calculated frequency difference is 13.9THz which is within the given frequency range of the limitation 13.7-17.9THz, the argued feature is not persuasive.

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